

Date: Wednesday, 11/03/2009 1:06:36 PM
User: Linda Lacelle

Process Sheet

Split

Customer : CU-DAR001 Dart Helicopters Services Drawing Name : STRUT WELDMENT ASS'Y
Job Number : 46127 -2
Estimate Number : 10675
P.O. Number :
This Issue : 11/03/2009 S.O. No. :
Prsht Rev. : NC
First Issue : 02/03/2009 Type : LARGE FAB ASSY
Previous Run : 44485
Written By :
Checked & Approved By :
Comment : EST REV. A 05.11.17 NEW ISSUE EC

Part Number : D3443041
Drawing Number : D3443 REV. B
Project Number : N/A
Drawing Revision : B
Material :
Due Date : 13/03/2009 Qty: 44 Um: Each

Additional Product

Job Number:



Seq. #: Machine Or Operation: Description :

1.0 D34431 Lug



Comment: Qty.: 1.0000 Each(s)/Unit Total : 14.0000 Each(s)

Pick:

Qty	Part Number	Description	Batch
1	D3443-1	lug	B41913 → 7

SP 09.03.17

B46143 → 7

2.0 D34435 Tubing



Comment: Qty.: 1.0000 Each(s)/Unit Total : 14.0000 Each(s)

Pick:

Qty	Part Number	Description	Batch
1	D3443-5	Tubing	B46142

SP 09.03.17

3.0 D34531 Clevis



Comment: Qty.: 1.0000 Each(s)/Unit Total : 14.0000 Each(s)

Pick:

Qty	Part Number	Description	Batch
1	D3453-1	Clevis	B42178

SP 09.03.17

4.0 238805 SS DOWEL PIN 3/4" LONG



Comment: Qty.: 2.0000 Each(s)/Unit Total : 28.0000 Each(s)

Pick:

Qty	Part Number	Description	Batch
2	238-805	SS DOWEL PIN 3/4" LONG	M11689

M11689

SP 09/03/17 (X14)

W/O:		WORK ORDER CHANGES						
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector	

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Date: Wednesday, 11/03/2009 1:06:36 PM
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Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: STRUT WELDMENT ASS'Y

Job Number: 46127

Part Number: D3443041

Job Number:



Seq. #:

Machine Or Operation:

Description :

5.0

LARGE FAB 1

LARGE FABRICATION RESOURCE 1



Comment: LARGE FABRICATION RESOURCE 1
Weld assembly as per dwg D3443

M-1 09/03/18
SP 09-03-18. 14X.

6.0

QC9

VISUAL WELDING INSPECTION



Comment: VISUAL WELDING INSPECTION

PD 09-03-18 (14)

7.0

QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

S 09-03-18 (14)

8.0

POWDER COATING

POWDER COATING



Comment: POWDER COATING
1-Mask holes as per dwg D3443

2-Powder Coat White Gloss (Ref: 4.3.5.2) as per QSI 005 4.3

START TIME: 2:00pm
OVEN TEMPERATURE: 400°F
FINISH TIME: 2:30pm

M 09-03-19 (14)

9.0

QC3

INSPECT POWDER COAT/CHEMICAL CONVERSION



Comment: INSPECT POWDER COAT/CHEMICAL CONVERSION

FD 09/03/20 (14)

10.0

63215K32

Spherical Bearing



Comment: Qty.: 1.0000 Each(s)/Unit Total: 14.0000 Each(s)
Pick:

Qty	Part Number	Description	Batch
1	63215K32	Spherical Bearing	

M109340 X3
M111039 X14
S 09/03/20 (14)

11.0

SMALL FAB 1

SMALL & MEDIUM FAB RESOURCE 1




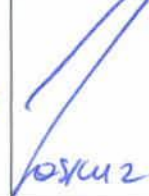
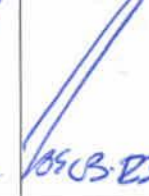


Comment: SMALL & MEDIUM FAB RESOURCE 1
Assemble bearing and ball plungers as per dwg D3443 ensure bearing rotates smoothly

FF 09/03/23 (4)

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: D3443-041 PAR #: NIA Fault Category: Prod / Fin. Assy med # Small NCR: Yes No DQA: D Date: 09/03/26
 Resolution: Scrap Disposition: Scrap QA: N/C Closed: D Date: 09/03/26

NCR: 46127-2		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			
09-03-23	11-	Replaced 4 Damaged 63215K32 Spherical Bearing Don't have the proper Tooling to instal R.C. process.		Replaced with new ones. # m111039 4x Don't See PAR 09-013 to fabricate a DT tool to press fit bearings.	 09/03/23	 09/03/23		

NOTE: Date & initial all entries

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Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: STRUT WELDMENT ASS'Y

Job Number: 46127

Part Number: D3443041

Job Number:



Seq. #:

Machine Or Operation:

Description :

12.0

QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

08 09/03/23 (4)

13.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Identify and Stock

Location: ST 262 (sylvie)

09/03/20 x14

14.0

QC21

FINAL INSPECTION/W/O RELEASE



Comment: FINAL INSPECTION/W/O RELEASE

09/03/24

Job Completion



mr 09-03-23

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

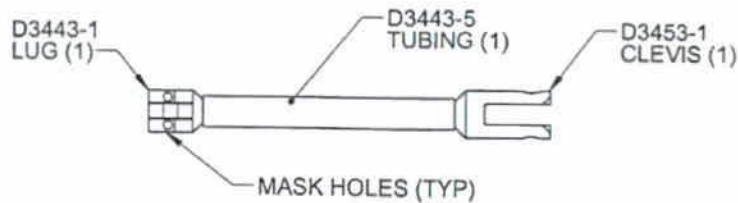
Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

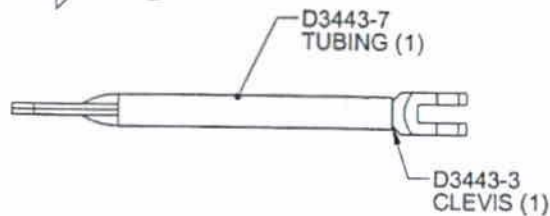
NOTE: Date & initial all entries

DART

DESIGN RF	DRAWN BY RF	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED <i>[Signature]</i>	APPROVED <i>[Signature]</i>	DRAWING NO. D3443	REV. B SHEET 1 OF 3
DATE 05.12.05	TITLE STRUT WELDMENT ASSEMBLY SCALE 1:4		
A	05.09.02	NEW ISSUE	
B	05.12.05	ADDED -9 PIN; REMOVED BALL PLUNGER; REVISE TOLERANCE; & $\phi 0.125$ WAS #30	

RELEASED05.12.09 *[Signature]*PRESS FIT McMASTER-CARR P/N 63215K32
BALL JOINT BEARING AFTER POWDER COAT

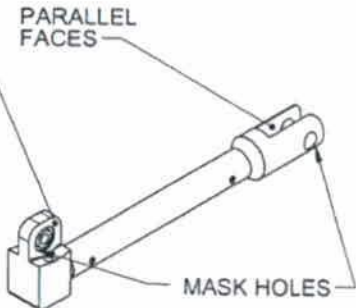
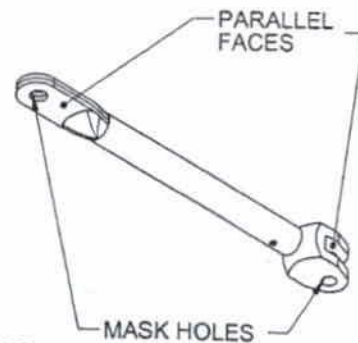
8.54

INSTALL SPAENAUER
P/N 238-805 DOWEL PIN
(TYP)0.10
(TYP)D3443-7
TUBING (1)D3443-3
CLEVIS (1)

9.78

INSTALL SPAENAUER P/N 238-805
DOWEL PIN

0.10

**D3443-041****D3443-043** SHOP COPYRETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO *40127***NOTES:**

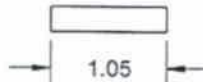
- 1) WELD PER DART QSI 004
- 2) FINISH: POWDER COAT WHITE (4.3.5.2) PER DART QSI 005 4.3
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) ALL DIMENSIONS ARE IN INCHES
- 5) IDENTIFY WITH DART P/N USING FINE POINT PERMANENT INK MARKER

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DART

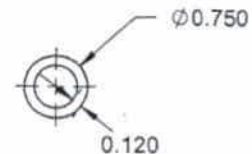
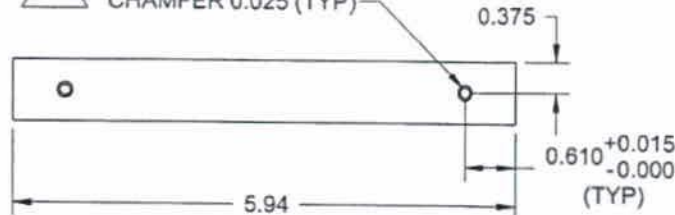
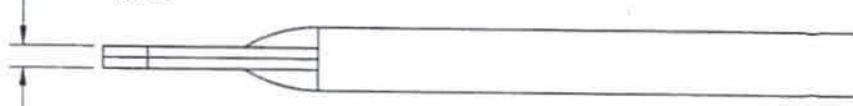
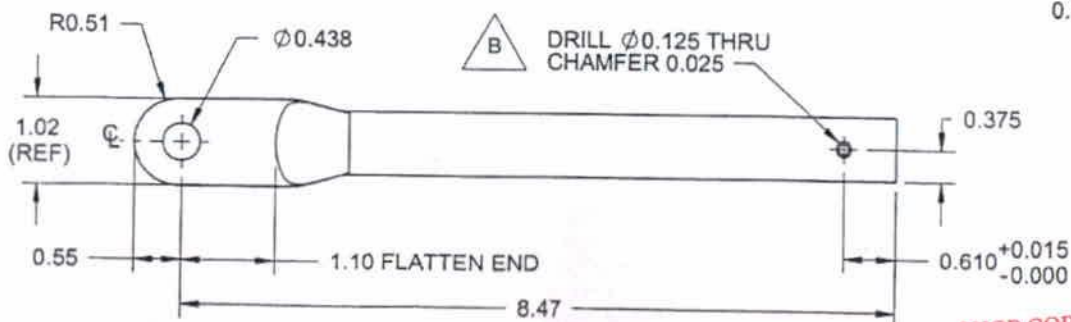
DESIGN RF	DRAWN BY RF	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED #	APPROVED #	DRAWING NO. D3443	REV. B SHEET 3 OF 3
DATE 05.12.05	TITLE STRUT WELDMENT ASSEMBLY 1:2		

 $\phi 0.210^{+0.005}_{-0.010}$ **D3443-9 PIN****D3443-9 NOTES:**

- 1) MATERIAL: DELRIN II 150R OR ACETRON GP ACETAIL (REF. DART SPEC M-DELRIN-R)
- 2) FINISH: NONE
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) ALL DIMENSIONS ARE IN INCHES

RELEASED

05.12.09

DRILL $\phi 0.125$ THRU
CHAMFER 0.025 (TYP)**D3443-5 TUBING** $0.260^{+0.000}_{-0.030}$ DRILL $\phi 0.125$ THRU
CHAMFER 0.025**D3443-7 TUBING****D3443-5/-7 NOTES:**

- 1) MATERIAL: AISI 316/304 SS SEAMLESS TUBING (REF. DART SPEC M304TR0.7500W.120)
- 2) FINISH: NONE
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) ALL DIMENSIONS ARE IN INCHES
- 5) BREAK ALL UNMARKED SHARP EDGES 0.005 TO 0.025

SHOP COPYRETURN TO
ENGINEERING**UNCONTROLLED COPY**

SUBJECT TO AMENDMENT

WITHOUT NOTICE

WORK ORDER

NO.

116127

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